

## PACT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

GERVASI, Gemma  
Notarbartolo & Gervasi S.p.A.  
Corso di Porta Vittoria, 9  
I-20122 Milan  
ITALIE

Date of mailing (day/month/year) 01 November 2000 (01.11.00)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference 1774PTWO	
International application No. PCT/EP00/00902	International filing date (day/month/year) 04 February 2000 (04.02.00)

1. The following indications appeared on record concerning:		
<input checked="" type="checkbox"/> the applicant	<input type="checkbox"/> the inventor	<input type="checkbox"/> the agent <input type="checkbox"/> the common representative
Name and Address SIR INDUSTRIALE S.P.A. Via Grocco, 2979 I-27036 Mortara Italy	State of Nationality IT	State of Residence IT
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
<input type="checkbox"/> the person	<input type="checkbox"/> the name	<input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence
Name and Address SIR INDUSTRIALE S.P.A. Via Vittorio Emanuele II, 5 I-27100 Pavia Italy	State of Nationality IT	State of Residence IT
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to:		
<input checked="" type="checkbox"/> the receiving Office	<input checked="" type="checkbox"/> the designated Offices concerned	
<input type="checkbox"/> the International Searching Authority	<input type="checkbox"/> the elected Offices concerned	
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  C. Cupello
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing</b> (day/month/year) 01 December 2000 (01.12.00)	
<b>International application No.</b> PCT/EP00/00902	<b>Applicant's or agent's file reference</b> 1774PTWO
<b>International filing date</b> (day/month/year) 04 February 2000 (04.02.00)	<b>Priority date</b> (day/month/year) 12 March 1999 (12.03.99)
<b>Applicant</b> ROSSI, Pietro, Paolo et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

11 October 2000 (11.10.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland	<b>Authorized officer</b>  Claudio Borton
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

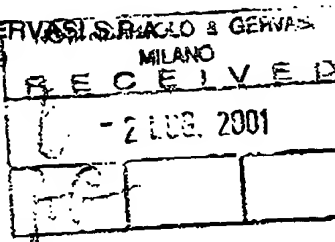
GERVASI, Gemma

NOTARBARTOLO & GERVAZI S. R.L. & GERVAZI S. R.L.

Corso di Porta Vittoria, 9

I-20122 Milano

ITALIE



**PCT**

**NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**  
(PCT Rule 71.1)

Date of mailing  
(day/month/year)

29.06.2001

Applicant's or agent's file reference  
1774PTWO

**IMPORTANT NOTIFICATION**

International application No.  
PCT/EP00/00902

International filing date (day/month/year)  
04/02/2000

Priority date (day/month/year)  
12/03/1999

Applicant

SIR INDUSTRIALE S.P.A. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

**4. REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/



European Patent Office  
D-80298 Munich

Tel. +49 89 2399 - 0 Tx 523856 epmu d

Fax. +49 89 2399 - 4465

Authorized officer

Connolly, M

Tel. +49 89 2399-8021



# **INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No. **PCT/EP00/00902**

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## **V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

### **1. Statement**

Novelty (N)	Yes:	Claims 4-6,17,19
	No:	Claims 1-3,7-16,18
Inventive step (IS)	Yes:	Claims 4-6,17,19
	No:	Claims
Industrial applicability (IA)	Yes:	Claims 1-19
	No:	Claims

2. Citations and explanations  
**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1 = WO-A-9403545

D2 = "Benzamide, 4-(1,1,dimethyl)-N,N-bis(2-hydroxyethyl)"

CHEMLIST COPYRIGHT 2000 ACS, XP002138316 AN 39963

On NDSL Canada Gazette, Part I January 31, 1998

- 2.1. Document D1, which is considered to represent the most relevant state of the art, discloses (page 4, line 2 to page 5, line 13 and claims 1-3 and 10) a powder coating composition containing a carboxylated polyester resin with free carboxy groups and a crosslinking mixture, said mixture comprises at least one compound with a beta-hydroxyalkylamide functionality of 4 and at least one with a functionality of 2 and the weight ratio between the first compound to the second compound is from 90:10 and 10:90.  
Consequently, the mean beta-hydroxyalkylamide functionality defined in claims 2 is the same as disclosed in D1.
- 2.2. Therefore, the subject-matter of claims 1-3, 7-16 and 18 lacks novelty in view of D1.
- 2.3. The subject-matter of claim 4 differs from the disclosure of D1 in that a benzamide is used as a crosslinking agent instead of an acetamide.
- 2.4. The subject-matter of claim 19 differs from the disclosure of D1 in that a t-butyl substituted phenyl group is present in the beta-hydroxyalkylamide compound instead of a methyl group.
- 3.1. The submitted examples show that the replacement of the acetamide of

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/EP00/00902

D1 by the benzamide of the application in the crosslinking mixture having a mean functionality of 3 used in the process for the preparation of powder paints leads to a better aesthetic appearance.

- 3.2. Therefore, the objective technical problem solved by the aforementioned distinguishing feature is to provide a powder paint having a better aesthetic appearance.
- 3.3. The documents of file do not suggest said effect and thus the subject-matter of claims 4 and 19 as well as of claim 5 and 6 which are dependent on claim 4 and of claim 17 which defines the use of said benzamide compound in the preparation of thermosetting powder paints fulfills the requirements of Article 33(3) PCT.
4. For all claims (1-19) industrial applicability is acknowledged.



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>C09D 167/00, C07C 233/69</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 00/55266</b> <b>(43) International Publication Date:</b> 21 September 2000 (21.09.00)
<b>(21) International Application Number:</b> PCT/EP00/00902 <b>(22) International Filing Date:</b> 4 February 2000 (04.02.00) <b>(30) Priority Data:</b> MI99A000511 12 March 1999 (12.03.99) IT <b>(71) Applicant (for all designated States except US):</b> SIR INDUSTRIALE S.P.A. [IT/IT]; Via Grocco, 2979, I-27036 Mortara (IT). <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> ROSSI, Pietro, Paolo [IT/IT]; Via Asilo, 1, I-27026 Garlasco (IT). MARELLI, Gino [IT/IT]; Via Cascina A valle, 1, I-22031 Albavilla (IT). BALDINI, Alberto [IT/IT]; Cascina S. Uliana, I-27026 Garlasco (IT). <b>(74) Agent:</b> GERVASI, Gemma; Notarbartolo & Gervasi S.p.A., Corso di Porta Vittoria, 9, I-20122 Milan (IT).		<b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> MIXTURES OF $\beta$ -HYDROXYALKYL AMIDES AND THEIR USE AS CROSS-LINKING AGENTS FOR THE PREPARATION OF POWDER PAINTS  <b>(57) Abstract</b>  Described herein are mixtures of $\beta$ -hydroxyalkyl amides, particularly suitable for being used as cross-linking agents in the field of powder paints, and more in particular as cross-linking agents for painting compositions in which the binding mixture consists of polyester resins having free carboxyl groups. Also described are powder paints that contain the said cross-linking mixtures, and the process for their preparation.		

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
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AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
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DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		



## INTERNATIONAL SEARCH REPORT

Inter. Application No

PCT/EP 00/00902

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C09D167/00 C07C233/69

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C09D C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 94 03545 A (DSM NV ; STANSSENS DIRK ARMAND WIM (NL); ELSHOUT WILHELMUS HENRICUS) 17 February 1994 (1994-02-17) claims 1-12 & EP 0 652 911 A cited in the application ---	1-3, 7-16, 18
X	"Benzamide, 4-(1,1-dimethyl)-N,N-bis(2-hydroxyethyl)" CHEMLIST COPYRIGHT 2000 ACS, XP002138316 AN 39963 On NDSL Canada Gazette, Part I January 31, 1998 (1998-01-31) ---	19
A	US 4 801 680 A (VICHA SUSAN K ET AL) 31 January 1989 (1989-01-31) claims 1-9 -----	17

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

23 May 2000

Date of mailing of the international search report

20/06/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Decocker, L

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP90/00902

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9403545 A	17-02-1994	BE 1006097 A	10-05-1994
		AU 664482 B	16-11-1995
		AU 4763193 A	03-03-1994
		CN 1086836 A	18-05-1994
		EP 0652911 A	17-05-1995
		NO 950296 A	26-01-1995
US 4801680 A	31-01-1989	CA 1330682 A	12-07-1994
		DE 3885258 D	02-12-1993
		DE 3885258 T	05-05-1994
		EP 0322834 A	05-07-1989
		ES 2061620 T	16-12-1994
		JP 2003458 A	09-01-1990
		JP 2594346 B	26-03-1997
		KR 9302217 B	27-03-1993
		MX 164778 B	23-09-1992

# PATENT COOPERATION TREATY

# PCT

REC'D 03 JUL 2001

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14

Applicant's or agent's file reference <b>1774PTWO</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/EP00/00902</b>	International filing date (day/month/year) <b>04/02/2000</b>	Priority date (day/month/year) <b>12/03/1999</b>
International Patent Classification (IPC) or national classification and IPC <b>C09D167/00</b>		
Applicant <b>SIR INDUSTRIALE S.P.A. et al.</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  <b>11/10/2000</b>	Date of completion of this report  <b>29.06.2001</b>
Name and mailing address of the international preliminary examining authority:   <b>European Patent Office</b> <b>D-80298 Munich</b> <b>Tel. +49 89 2399 - 0 Tx: 523656 epmu d</b> <b>Fax: +49 89 2399 - 4465</b>	Authorized officer  <b>Kaul-Buchberger, E</b>  <b>Telephone No. +49 89 2399 8296</b> 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/EP00/00902

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-20 as originally filed

**Claims, No.:**

1-19 as originally filed

**Drawings, sheets:**

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

# INTERNATIONAL COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>1774PTWO</b>	<b>FOR FURTHER ACTION</b>		see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/EP 00/ 00902</b>	International filing date (day/month/year) <b>04/02/2000</b>	(Earliest) Priority Date (day/month/year) <b>12/03/1999</b>	
Applicant  <b>SIR INDUSTRIALE S.P.A. et al.</b>			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of Invention is lacking** (see Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.